UPDATE

Kitchen Thermometers

One of the critical factors in controlling pathogens in food is controlling temperature. Disease-causing microorganisms such as bacteria, viruses and parasites grow very slowly at low temperatures, multiply rapidly in mid-range temperatures and are killed at high temperatures. For safety, perishable foods must be held at proper cold temperatures to inhibit bacterial growth or cooked to temperatures high enough to kill harmful microorganisms. It is essential to use a food thermometer when cooking meat, poultry and egg products to prevent undercooking and consequently prevent foodborne illnesses.

Why Use a Food Thermometer?
Using a food thermometer is the only reliable way to ensure safety and to determine the "doneness" of meat, poultry and egg products. To be safe, these foods must be cooked to an internal temperature high enough to destroy any harmful microorganisms that may be in the food.

"Doneness" refers to when a food is cooked to a desired state and indicates the sensory aspects of foods such as texture, appearance and juiciness. Unlike the temperatures required for safety, these sensory aspects are subjective.

Color is Not a Reliable Indicator
Many food handlers believe that visible indicators, such as color changes can be used to determine if foods are cooked to a point where pathogens are killed. However, recent research has shown that color and texture indicators are unreliable. For example, ground beef may turn brown before it reaches a temperature where pathogens are destroyed. A consumer preparing hamburger patties and using the brown color as an indicator of "doneness" is taking a chance that pathogenic microorganisms may survive.

Safety Versus Doneness
The temperature at which different pathogenic microorganisms are destroyed varies, as does the "doneness" temperature for different meat and poultry. A roast or steak that is not pierced in any way during processing or preparation and reaches an internal temperature of 145 °F is safe to eat. A consumer looking for a visual sign of "doneness" might continue cooking it until it is overcooked and dry. However, a consumer using a food thermometer to check for "doneness" can feel assured the food has reached a safe temperature and is not over- or undercooked.

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